

REMARKS

Claim Rejections under 35 U.S.C. § 103

Claim 3 was further rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Gillies *et al.* (1993, *Bioconjugate Chem.* 4:230-235, hereinafter “Gillies”) and Gray *et al.* (U.S. Patent No. 6,444,792, hereinafter “Gray”) in view of Winter *et al.* (U.S. Patent No. 5,624,821, hereinafter “Winter”). Applicants respectfully traverse the rejection as applied to the pending claims.

Claim 3 was canceled in the Amendment and Response submitted on March 30, 2005. Therefore, Applicants submit that the Examiner’s argument is moot as pertaining to claim 3, and request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a). Claim 3 was dependent upon claim 1. In the Amendment and Response submitted on March 30, 2005, claim 1 was amended to incorporate the limitations of canceled dependent claim 3. Claim 1 is directed to a region of a gene construct encoding an antibody-based fusion protein, the region including at its at its 3’ end, nucleotides encoding a non-Ig protein, and at its 5’ end nucleotides encoding at least a portion of an IgG1 CH2 domain with a mutation or a deletion at one or more amino acids selected from the group consisting of Leu₂₃₄, Leu₂₃₅, Gly₂₃₆, Gly₂₃₇, and Asn₂₉₇.

Applicants submit that neither Gray nor Winter provides a motivation to modify the construct of Gillies to incorporate a mutation at position 234, 235, 236, 237, or 297. The Office action alleged that Gray provided such a motivation by teaching “the benefits of engineering antibody-based fusion proteins with reduced affinity for Fc receptors” (Office action, p.7). Gray, however, does not teach that reducing affinity for Fc receptors is associated with an increased serum half-life, as discussed in detail in the Amendment and Response of March 30, 2005, and provides no (other) motivation for reducing the affinity of the constructs of Gillies for Fc receptors. Winter similarly fails to provide such a motivation. Absent such a motivation, the cited references cannot render the claimed invention obvious. Applicants therefore respectfully request reconsideration and withdrawal of the rejection to the extent it is maintained against the pending claims.

CONCLUSION

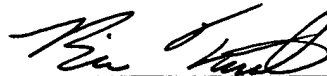
Applicants respectfully submit that the claims pending in this application are in condition for allowance. If the Examiner would like to discuss any outstanding issues, she is invited to telephone the undersigned.

Respectfully submitted,

Date: March 30, 2005
Reg. No. 48,645

Tel. No.: (617) 261-3169
Fax No.: (617) 261-3175

BOS-828820 v1



Brian A. Fairchild
Attorney for the Applicants
Kirkpatrick & Lockhart Nicholson
Graham LLP
75 State Street
Boston, Massachusetts 02109-1808